Paper No. 24

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte MARK THOMAS BELLINO, DAVID GLENN BLACK,
GREGORY W. HAGGQUIST, RONALD HAROLD LEVIN,
WEIMEI LUO-GHELETA, SCOTT THOMAS MOSIER,
DAT QUOC NGUYEN, BRADFORD LEE TAYLOR and
FRANKLIN DILWORTH ZARTMAN

Appeal No. 2003-1774
Application No. 09/797,038

ON BRIEF

Before KIMLIN, OWENS and PAWALIKOWSKI, Administrative Patent Judges.

KIMLIN, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 1-9.

Claim 1 is illustrative:

1. A photoconductor comprising

a conductive support layer,

a charge generation layer and

> a charge transport layer, said charge transport layer comprising a binder resin, a hydrazone charge transport material, acetosol yellow 5GLS and the butylated reaction product of p-cresol and dicyclopentadiene.

The examiner relies upon the following references as evidence of obviousness:

Cottman	3,935,281	Jan. 27, 1976
Anderson et al. (Anderson)	4,362,798	Dec. 07, 1982
Williams, Jr. (Williams)	5,234,753	Aug. 10, 1993
Mori	5,567,557	Oct. 22, 1996
Mitsumori	5,804,344	Sep. 08, 1998
Itami	5,981,125	Nov. 09, 1999
Kemmesat et al. (Kemmesat)	6,001,523	Dec. 14, 1999
Niimi	6,087,055	Jul. 11, 2000 (filed Mar. 04, 1998)

Kierstein et al. (Kierstein) WO 00/05628 Feb. 03, 2000
(PCT International Application)(priority date Jul. 21, 1998)

Haggquist et al. (Haggquist) WO 00/45225 Aug. 03, 2000
(PCT International Application)(priority date Jan. 27, 1999)

ACS File registry no. 92091-43-5

Colour Index, third edition (second vision), Vol. 7, published by The Society of Dyers and Colourists (1982), pp. 7234-7235

Trademark electron search system (TESS) search result for the trademark ACETOSOL.

The present application is related to U.S. 09/237,880, filed January 27, 1999, now U.S. Patent No. 6,544,702. An appeal was

taken in the related application and in a decision dated September 30, 2002, the Board reversed the examiner's rejection of the appealed claims under 35 U.S.C. § 112, second paragraph.

Appellants' claimed invention is directed to a photoconductor comprising, inter alia, a charge transport layer comprising acetosol yellow 5GLS and the butylated reaction product of p-cresol and dicyclopentadiene. The reaction product is an antioxidant and is commercially available as WINGSTAY L HLS. According to appellants, the "advantages of this invention are largely eliminating light fatigue of the photoconductor while realizing the physical and cost advantages of DEH" (DEH is p-diethylamino-benzaldehyde-(diphenylhydrazone)) (page 3 of principal brief, second paragraph).

Appealed claims 1-9 stand rejected under 35 U.S.C. § 112, second paragraph.

In addition, the appealed claims stand rejected under 35 U.S.C. § 103 as follows:

(a) Claims 1-7 over Anderson in view of the admitted prior art, Mori, Niimi, Williams and Cottman;

(b) Claims 1-7 over Haggquist in view of Mori, Niimi, Williams and Cottman;

(c) Claims 1-7 over Kemmesat in view of Haggquist, Mori, Niimi, Cottman and Williams;

(d) Claims 8 and over Kemmesat in view of Haggquist, Mori, Niimi, Williams, Cottman, Kierstein, Itami and Mitsumori.

Also, claims 1, 2 and 5 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the claims of the related application, US Patent No. 6,544,702.

We have thoroughly reviewed each of appellants' arguments for patentability. However, we are in complete agreement with the examiner that the appealed claims are unpatentable under 35 U.S.C. § 112, second paragraph, 35 U.S.C. § 103 and the judicially created doctrine of obviousness-type double patenting. Inasmuch as we totally concur with the rationale underlying the examiner's rejections, as well as the examiner's cogent response to the arguments presented by appellants, we will adopt the examiner's reasoning as our own in sustaining the rejections of record. We add the following for emphasis only.

We consider first the examiner's rejection under § 112, second paragraph, for the reason that the claim term "acetosol yellow 5GLS" is an improper trade name or trademark. Although the Board reversed the examiner's § 112, second paragraph, rejection of the claim term "CI Solvent Yellow 138" in the related application, we agree with the examiner that the issue presented in the instant appeal is based on different facts than those in the related appeal. As explained by the examiner, appellants utilize the dye in the present invention not for its color but as an agent to reduce room light fatigue. Hence, while it may be reasonable to conclude that all materials/compositions having the designation C.I. Solvent Yellow 138 share the properties listed in the Colour Index, "[a]ppellants have not explained why all such materials would necessarily be useful for the function required by their claimed invention" (page 23 of answer, last paragraph). The examiner properly states that "[t]he Colour Index definition of C.I. Solvent Yellow 138 does not include its use as an agent to 'reduce room light fatigue' as used in the instant invention" (Id.). Based on appellants' specification, the examiner is on sound footing in reasoning that

"the reduction of light fatigue appears to involve a specific chemical process that depends on the chemical composition (as distinct from the color value) of the material" (page 24 of answer).

Concerning the § 103 rejection of claims 1-7 over Anderson as the primary reference, we concur with the examiner that, based the collective teachings of the applied prior art, it would have been obvious prima facie obvious for one of ordinary skill in the art to employ the claimed reaction product of p-cresol and dicyclopentadiene as an antioxidant in the charge transport layer of Anderson with the reasonable expectation that the photoconductor would have improved durability against active gases, such as ozone, as well as have enhanced repetition characteristics. We agree with the examiner that Mori provides a generic teaching of using a hindered phenol antioxidant and, since Williams and Cottman disclose that the presently claimed hindered phenol antioxidant is useful for preventing the deleterious effects of oxygen and ozone, one of ordinary skill in the art would have found it obvious to select the claimed

hindered phenol antioxidant as a suitable agent for improving durability against ozone in the charged transport layer of Mori. While appellants maintain that the examiner has extracted "far too much than is reasonable [sic, reasonably] supported from the general statement in Mori" (page 9 of principal brief, first paragraph), appellants have presented no substantive arguments why one of ordinary skill in the art would have been dissuaded from selecting the claimed reaction product of p-cresol and dicyclopentadiene as the hindered phenol antioxidant in the charge transport layer of Mori.

Appellants present essentially the same argument against the other § 103 rejections applied by the examiner.

Regarding the § 103 rejection of claims 1-7 over Haggquist as the primary reference, appellants present the additional argument that Haggquist is not prior art. Appellants come to this conclusion because "[a]ll of the inventors in Haggquist are inventors (along with others) on this application, and the Haggquist publication is less than a year from the filing of this application" (page 9 of principal brief, paragraph 4). However, since Haggquist lists three inventors and the present application

has nine inventors, the examiner properly concluded that "[t]he inventive entity in Haggquist is not the same as the inventive entity in this application" (page 30 of answer, first paragraph). Appellants' attention is directed to MPEP section 2136.04. Also, as explained by the examiner, appellants have proffered no evidence which establishes that portions of Haggquist relied on in the rejection are the work of all of the nine present inventors, "[n]or have appellants filed a petition to amend the inventorship of the instant application, limiting the inventorship to the inventors listed on Haggquist" (page 30 of Answer, second paragraph).

Concerning the remaining rejections of the examiner, no further comment is necessary.

In conclusion, based on the foregoing, and the reasons well-stated by the examiner, the examiner's decision rejecting the appealed claims is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED

EDWARD C. KIMLIN Administrative Patent Judge	)	
TERRY J. OWENS Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
BEVERLY A. PAWLIKOWSKI Administrative Patent Judge	)	

ECK/vsh

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